

## IN THE SPECIFICATION

Please amend the specification as indicated below. A redlined version of the amended paragraphs is attached to this response as Appendix A.

Please replace the paragraphs identified below with the following amended paragraphs:

Page 4, paragraph no. 1011:

**[1011]** The data services are provided to a subscriber station on a Forward Packet Data Channel (F-PDCH), which is shared by packet data users based on time multiplexing. The F-PDCH is composed of a number of code-division-multiplexed Walsh sub-channels. The number of sub-channels varies in time depending on the demands of the circuit-switched voice and data users. The F-PDCH structure is illustrated in **FIG. 3**. The information bit stream **302** to be transmitted is segmented into packets of several sizes. A 16-bit cyclic redundancy check (CRC) is added to each packet in block **304**, and 6-bit turbo encoder tail allowance is added in block **306** yielding an encoder packet. In one embodiment, the encoder packets are of sizes 384 bits, 768 bits, 1,536 bits, 2,304 bits, 3,072 bits, and 3,840 bits. The encoder packets are encoded by block **308**. Each encoded packet is then scrambled in blocks **310** by a scrambling pattern generated by block **312** and interleaved by block **314**. Some or all of the interleaved symbols are then selected to form sub-packets in block **316**. Depending on the length of the sub-packet, the sub-packet comprises 1, 2, 4, or 8 slots. In one embodiment, the slot is 1.25 ms long. The sub-packet are QPSK, 8-PSK, or 16-QAM modulated by block **318** and demultiplexed into a variable number of pairs (In-phase and Quadrature) of parallel streams by block **320**. Each of the parallel streams is covered with a distinct 32-ary Walsh function by blocks **322(i)**. The Walsh-coded symbols of all the streams are

summed together to form a single In-phase stream and a single Quadrature stream by block 324. The In-phase stream and the Quadrature streams are provided to a block 326, which adjusts the channel's gain. Several forward link channels, both data and voice are then summed in block 328, quadrature spread in block 330, and the resultant In-phase and Quadrature streams are baseband filtered in block 332(i), upconverted in blocks 334(i) and summed in block 336.

Page 12, paragraph no. 1052:

[1052] In accordance with another embodiment, illustrated in FIG. 5, the slot(s) 502(i) of the sub-packet 500 contain data for several subscriber stations. Data from all the slots 502(i) of the sub-packet 500 for a particular mobile are sent using one or more of the available Walsh channels. As illustrated in FIG. 5, slots 502(1)-502(n) contain data encoded by Walsh codes 504(1)-504(m), therefore, carry data for  $m$  subscriber stations. Consequently, the number of subscriber stations receiving information concurrently may be changed on a sub-packet to sub-packet basis.

Page 14, paragraph no. 1057:

[1057] Each of the CDM channels 608(i) comprises information enabling the subscriber station to determine which of the CDM channels 608(i) is intended for the subscriber station and information enabling the subscriber station to demodulate the F-PDCH. The information enabling the subscriber station to determine which of the CDM channels 608(i) is intended for the subscriber station comprises a MAC ID 610(i). The information enabling the subscriber station to demodulate the F-PDCH comprises an ARQ ID 612(i), a sub-packet ID 614(i), a packet size 616(i), and a number of Walsh channels used 618(i). In one embodiment, the current F-PDCCH coding and modulation is used for each of the CDM channels 608(i). During the post processing, each of the subscriber stations demodulates the MAC ID 610(i) of a CDM channel 608(i). If the MAC ID 610(i) indicates that the CDM channel 608(i) does not contain

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cont.

information for the subscriber station, the subscriber station ceases further post processing of the channel and repeats the procedure for the next CDM channel 608(i+1). If a subscriber demodulates a MAC ID 610(i) indicating that the CDM channel 608(i) contains information for the subscriber station, the subscriber station demodulates the remaining information, and processes the sub-packet on the F-PDCH in accordance to the gathered information.

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Page 15, paragraph no. 1061:

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[1061] FIG. 7 illustrates a structure of the modified F-SPDCCH 700. The modified F-SPDCCH 700 comprises information enabling the two subscriber stations to demodulate the F-PDCH. Therefore, the F-SPDCCH 700 comprises and MAC IDs for each subscriber stations 702(1), 702(2), ARQ IDs 704(1), 704(2), sub-packet IDs 706(1), 706(2), encoder packet sizes 708(1), 708(2), and number of Walsh channels used 710(1), 710(2). The structure can be further simplified if the second subscriber station is assumed to use a number of Walsh channels less than or equal to the number of Walsh channels of the second subscriber station. Then the modified F-SPDCCH 700 comprises only one of the blocks 710(1), 710(2).

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Page 17, paragraph no. 1065:

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[1065] FIG. 8 illustrates a control channel structure the F-SPDCCH 800, and the CDM control channel 802. The F-SPDCCH 800 comprises an MAC ID 804, ARQ ID 806, sub-packet ID 808, encoder packet size 810, and numbers of Walsh channels used 812 for one of the possible two shared channels, and a CDM indicator 814.

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Page 17, paragraph no. 1068:

[1068] Upon receiving the modified F-SPDCCH 800, each of the subscriber stations decodes the MAC ID 804. If the decoded MAC ID is identical to the subscriber station's MAC ID, the subscriber station decodes the remaining information from the F-SPDCCH 800, and processes the sub-packet of the F-PDCH in accordance with the information.

Ne [Page 17, paragraph no. 1069:]

[1069] The subscriber stations, MAC IDs of which are not identical with the decoded MAC ID, decode the CDM indicator 814. If the CDM indicator 814 indicates that no CDM control channel 802 is transmitted, the subscriber stations cease further processing; otherwise the subscriber stations decode the MAC ID 816. The subscriber station, a MAC ID of which is identical with the decoded MAC ID acquires the remaining information from the CDM control channel 802, and processes the sub-packet of the F-PDCH in accordance with the information. The subscriber stations, MAC IDs of which are not identical with the decoded MAC ID cease further processing.

Page 28, paragraph no. 1095:

A7 [1095] Because all subscriber stations must reliably receive the control channel 1302(1), the control channel 1302(1) is transmitted at power determined by power requirement of the subscriber station with the worst forward link quality metric. Because each of the control channels 1302(2)-1302(m) are intended for one of the subscriber stations and the base station has an information about the subscriber station forward link quality metric, the base station transmits each of the channels 1302(2)-1302(m) at the minimum power determined by power requirement of the subscriber station.

[Page 28, paragraph no. 1096]

[1096] In one embodiment, the control channels **1302(i)** are transmitted concurrently, consequently, each of the subscriber stations accumulates data from all the channels **1302(i)**, and then post processes the accumulated data. During the post processing, each of the subscriber stations first demodulates the control channel **1302(1)** and decodes a MAC ID of block **1306(1)**. The subscriber station with MAC ID identical to the MAC ID of block **1306(1)** decodes the remaining information, and processes the sub-packet on the F-PDCH in accordance with the gathered information.

Page 29, paragraph no. 1099:

[1099] The subscriber stations with MAC ID matching the partial MAC ID of block **1308(1)** demodulate and decode the control channel **1302(m)**, to acquire the MAC ID of block **1306(m)**. The subscriber station with MAC ID identical to the MAC ID of block **1306(m)** demodulates and decodes the remaining information of the control channel **1302(m)**, and processes the sub-packet on the F-PDCH in accordance to the gathered information. The subscriber station with MAC ID not matching the MAC ID of block **1306(m)** demodulates the next control channel **1302(2)** as described below. Since the subscriber station has already processed the control channel **1302(m)**, the subscriber station continuing processing and encountering control channel **1302(m)** can cease further processing.

[Page 29, paragraph no. 1100:]

[1100] The subscriber stations with MAC ID not matching the partial MAC ID of block **1308(1)** demodulate the next control channel **1302(i)**, i.e., the control channel **1302(2)**. The subscriber station with MAC ID identical to the MAC ID of block **1306(2)** decodes the remaining information of the control channel **1302(2)**, and processes the sub-packet on the F-PDCH in accordance to the gathered information.

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